



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

28158

Applicant: Leonard Forbes et al.

Title: CIRCUITS WITH A TRENCH CAPACITOR HAVING MICRO-ROUGHENED SEMICONDUCTOR SURFACES

Docket No.: 303.389US2 Serial No.: 09/467,992
Filed: December 20, 1999 Due Date: January 10, 2002
Examiner: Eugene Lee Group Art Unit: 2815

Commissioner for Patents
Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard.
- ☒ An Amendment and Response under 37 CFR 1.111 (8 Pages).
- ☒ A Supplemental Information Disclosure Statement (1 pgs.), Form 1449 (1 pgs.), and copies of 12 cited references.
- ☒ A check in the amount of \$180.00 to cover the fee for consideration of Information Disclosure Statement under 97(c).
- ☒ A check in the amount of \$84.00 to cover the fee for additional claims as calculated below.
- ☒ Clean Version of Pending Claims (7 pgs.).

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If an additional fee is required due to changes to the claims, the fee has been calculated as follows:

CLAIMS AS AMENDED						
	(1) Claims Remaining After Amendment		(2) Highest Number Previously Paid For	(3) Present Extra	Rate	Fee
TOTAL CLAIMS	29	-	29		x 18 =	\$0.00
INDEPENDENT CLAIMS	9	-	8	1	x 84 =	\$84.00
[] MULTIPLE DEPENDENT CLAIMS PRESENTED						\$0.00
TOTAL						\$84.00

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 10th day of January, 2002.

Name Amy Moriarty

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(GENERAL)

S/N 09/467,992

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Leonard Forbes et al.

Examiner: Eugene Lee

Serial No.: '09/467,992

Group Art Unit: 2815

Filed: 'December 20, 1999

Docket: 303.389US21

Title: CIRCUITS WITH A TRENCH CAPACITOR HAVING MICRO-ROUGHENED SEMICONDUCTOR SURFACES

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents
Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on October 10, 2001. Please amend the above-identified patent application as follows.

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. The substitute claim set is intended to reflect amendment of previously pending claims 17, 31, 33, 36 and 41, and addition of new claim 51. The specific amendments to individual claims are detailed in the following marked up set of claims.

17. (Twice Amended) A memory cell, comprising:

a [lateral] transistor formed in a layer of semiconductor material outwardly from a substrate, the transistor including a first source/drain region, a body region and a second source/drain region;

a trench capacitor formed in a trench and coupled to the first source/drain region; and

a first plate of polycrystalline material formed in the trench that is coupled to a second plate integral with the first source/drain region thereby forming a conductorless electrical connection between the trench capacitor and the transistor, the second plate having an etch-roughened surface ; and

an insulator layer that separates the first polycrystalline plate from the etch-roughened surface of the second plate.